Attorney Docket: 19111.0045

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

SUB 2017

1. (currently amended) A query generator for generating a query for obtaining selected data from a database, the database having a number of detail tables in which data is stored, the query generator comprising a processor which is coupled to the database in use, the processor being adapted to:

a. receive an input indicating the selected data to be obtained to generate a first query;

b. analyse the input and determine whether the input requires a joining of data in a plurality of different detail tables, and an aggregation step; and, causing the processor to modify the input indicating the selected data to be obtained to generate a second query, the second query being adapted to cause the database to:

i. aggregate the data within each of the plurality of detail tables as required; and,

ii. join the aggregated data from each of the plurality of detail tables, the joined aggregated data representing the selected data. Attorney Docket: 19111.0045 PATENT

2. (currently amended) A query generator according to claim 1, wherein the second query causes the database to aggregate the data for each table by causing the database to:

select the data within the table for aggregation; and, ii. aggregate the data.

- 3. (original) A query generator according to claim 2, wherein the data is selected by implementing complex folders to generate inline views within the database, the inline views being maintained until the aggregation is completed.
- 4. (previously amended) A query generator according to claim 1, wherein the aggregation comprises at least one of: generating an average of the data, generating a sum of the data, generating a standard deviation of the data, and generating an evaluation of either a maximum or a minimum of the data.
- 5. (original) A query generator according to claim 1, the query generator further comprises an input device coupled to the processor to allow a user to generate the input.
- 6. (previously amended) A query generator according to claim 5, wherein the input is generated by selecting items from a list of possible items, each item representing

data contained within a respective database table, an action to be performed on data within the database, or both data contained within a respective database table and an action to be performed on data within the database.

- 7. (currently amended) A query generator according to claim 1, wherein the <u>first</u> query and the second query being generated as an SQL query queries.
- 8. (previously amended) A query generator according to claim 1, wherein the aggregation step requires the aggregation of data in different tables.
- 9. (currently amended) A database system, the database system comprising:
  - a. a database, the database comprising:
    - i. a store for storing data, the store having a number of detail tables; and,
    - ii. a database processor coupled to the store for obtaining data in accordance with a received query; and,
  - b. a query generator for generating a structured query for obtaining selected data from the database, the query generator comprising a processor adapted to:
    - i. receive an input representing the <u>a first structured</u> query to be generated;

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in analyse the input and determine whether the input requires a joining of data in a plurality of different detail tables, and an aggregation step; and,

iii. it causing the processor to modify the input indicating the selected data to be obtained to generate a second structured query, wherein the database processor responds to the second structured query to:

- (1) aggregate the data within each of the plurality of detail tables as required; and,
- (2) join the aggregated data from each of the plurality of detail tables, the joined aggregated data representing the selected data.
- 10. (previously amended) A system according to claim 9, wherein the database processor and the processor of the query generator are a same processor.
- 11. (original) A system according to claim 9, wherein the database processor aggregates the data for each table by:
  - i. selecting the data within the table for aggregation; and,
  - ii. aggregating the data.

- 12. (original) A system according to claim 11, wherein the database processor selects the data by implementing an inline view to generate complex folders within the database, the complex folders being maintained until the aggregation is completed.
- 13. (previously amended) A system according to claim 9, wherein the aggregation comprises at least one of: generating an average of the data, generating a sum of the data, generating a standard deviation of the data, and generating a maximum and a minimum evaluation of the data.
- 14. (previously amended) A system according to claim 9, the query generator further comprising an input device coupled to the processor of the query generator to allow a user to generate the input.
- 15. (previously amended) A system according to claim 14, wherein the input is generated by selecting items from a list of possible items, each item representing data contained within a respective database table, an action to be performed on data within the database, or both data contained within a respective database table and an action to be performed on data within the database.